

Product Center**BBL™ SEPTI-CHEK™ TSB (70 mL)**

| Catalog # | Description | Quantity | Unit |
|-----------|------------------------------|----------|------|
| 243178 | BBL™ SEPTI-CHEK™ TSB (70 mL) | 10 | SP |

Related Documents

- Package Insert
- MSDS
- Certificate of Analysis
- CLSI Procedures (3)
- White Papers (2)

BBL™ SEPTI-CHEK™ Blood Culture Bottles

Revision: 0401 Revision Date: 04/01/2001

Intended Use:

A qualitative test for the detection of microorganisms in blood.

Product Summary:

BBL™ SEPTI-CHEK™ Blood Culture media support the growth of a wide variety of clinically important pathogenic microorganisms, including fastidious organisms. Media are manufactured under CO₂ and nitrogen, and if used for the recovery of aerobic microorganisms should be vented following specimen addition and prior to incubation. Venting (addition of oxygen) may be performed either by attaching a **BBL SEPTI-CHEK** Slide or by using a sterile venting needle.

**Related Links**

- Package Inserts: Blood Culture
- White Papers: Blood Culture
- Product FAQs
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BHI and TSB media are generally recommended for the recovery of aerobic and facultative microorganisms, and bottles should be vented. Columbia Broth can be vented to recover aerobic and facultative microorganisms, or unvented for the recovery of anaerobic and facultative organisms. Thioglycollate Broth and Schaedler Broth are recommended primarily for the recovery of anaerobic and facultative microorganisms and should not be vented.

These media contain sodium polyanetholsulfonate (SPS). In addition to anticoagulant properties, SPS is anticomplementary and antiphagocytic, and interferes with the activity of aminoglycosides.¹

The use of a biphasic blood culture system has been shown to improve the sensitivity of blood culture over traditional broth media.²⁻⁴ When affixed to a **BBL SEPTI-CHEK** Blood Culture Bottle after inoculation with blood, the agar surfaces on the slide allow the subculture of aerobic, facultative and capnophilic microorganisms present in the specimen. The presence of both nonselective and selective differential agar media on the slide allows a pre-differentiation of the microorganisms present in the liquid medium.

User Quality Control:

The following list of suggested microorganisms may be used for the quality control testing of the **BBL SEPTI-CHEK** Blood Culture Bottle.

Aerobic Media

Inoculate the broth with a bacterial inoculum containing approximately 300 CFU/mL.

Streptococcus pneumoniae
(ATCC™ 6305)

Observe bottles for evidence of microbial growth.

Pseudomonas aeruginosa
(ATCC 27853)

To check for purity of results, subculture all positive growth.

Broth should appear turbid within 48 h of inoculation

Anaerobic Media

Streptococcus pneumoniae
(ATCC 6305)

Bacteroides fragilis
(ATCC 25285)

BBL™ SEPTI-CHEK™ Slide: For the quality control testing of the slide, inoculate a Chocolate Agar or TSA with 5% sheep blood plate with the test strains. Incubate 18 - 24 h aerobically in a CO₂-enriched atmosphere at 35 ± 2°C. Using TSA Broth, prepare serial dilutions of the test strains. Inoculate a **BBL SEPTI-CHEK** bottle with a bacterial inoculum of 500 - 1000 CFU/mL. Mix gently. Affix a **BBL SEPTI-CHEK** Slide to the bottle. Tip the system to inoculate the slide completely. Revert the system and incubate for 24 h. After incubation, growth of the following suggested test organisms should be visible on the slides:

| Microorganism | Agar 1 | Agar 2 | Agar 3 |
|---------------|--------|--------|--------|
|---------------|--------|--------|--------|

| | | | |
|--|--------|--------|--------|
| <i>Streptococcus pneumoniae</i> ATCC 6305 | Growth | — | — |
| <i>Neisseria meningitidis</i> * ATCC 13090 | Growth | — | — |
| <i>Enterococcus faecalis</i> ATCC 29212 | Growth | — | — |
| <i>Escherichia coli</i> ATCC 25922 | Growth | Growth | — |
| <i>Candida albicans</i> ATCC 60193 | Growth | — | Growth |

*May require 48 h for visible growth.

Properly dispose of all units used in quality control testing.

Reagents:

BBL SEPTI-CHEK 70 ML AND 20 ML BLOOD CULTURE BOTTLES; 20 mL bottle for small sample volume (pediatric) use.

Approximate Formulae* per L of Processed Water

BHI (Brain Heart Infusion), 70 mL and 20 mL

| | |
|-------------------------------------|--------|
| Pancreatic Digest of Gelatin | 17.5 g |
| Brain Heart, Infusion from (Solids) | 17.5 g |
| Yeast Extract | 4.0 g |
| Disodium Phosphate | 2.5 g |
| Meat Peptone | 2.0 g |
| SPS | 0.5 g |
| Sodium Chloride | 0.39 g |
| Dextrose | 0.16 g |

BHI-Supplemented, 70 mL

| | |
|-------------------------------------|---------|
| Modified Gelatin | 20.0 g |
| Brain Heart, Infusion from (Solids) | 17.5 g |
| Sodium Chloride | 5.0 g |
| Yeast Extract | 4.0 g |
| Pancreatic Digest of Gelatin | 3.5 g |
| Dipotassium Phosphate | 2.5 g |
| Meat Peptone | 2.0 g |
| Dextrose | 2.0 g |
| SPS | 0.25 g |
| Pyridoxal HCl | 0.10 g |
| Menadione Sodium Bisulfite | 0.005 g |

TSB (Trypticase™ Soy Broth), 70 mL and 20 mL

| | |
|-----------------------|---------|
| Casein Peptone | 17.0 g |
| Sodium Chloride | 5.0 g |
| Soy Peptone | 3.0 g |
| Yeast Extract | 2.5 g |
| Dextrose | 2.5 g |
| Dipotassium Phosphate | 2.5 g |
| SPS | 0.5 g |
| Hemin | 0.005 g |

TSB, with 10% Sucrose, 70 mL

| | |
|-----------------|---------|
| Sucrose | 100.0 g |
| Casein Peptone | 17.0 g |
| Sodium Chloride | 5.0 g |
| Soy Peptone | 3.0 g |
| Yeast Extract | 2.5 g |
| Dextrose | 2.5 g |

| | |
|-----------------------|---------|
| Dipotassium Phosphate | 2.5 g |
| SPS | 0.5 g |
| Hemin | 0.005 g |

Columbia Broth, 70 mL

| | |
|--------------------------|--------|
| Casein Peptone | 10.0 g |
| Meat Peptone | 8.0 g |
| Yeast Extract | 5.0 g |
| Sodium Chloride | 5.0 g |
| Tris Buffer | 3.7 g |
| Dextrose | 2.5 g |
| L-Cysteine Hydrochloride | 0.5 g |
| SPS | 0.5 g |
| Magnesium Sulfate | 0.5 g |
| Ferric Ammonium Citrate | 0.02 g |

Thioglycollate Broth, 70 mL

| | |
|-----------------------|--------|
| Casein Peptone | 15.0 g |
| Dextrose | 5.0 g |
| Yeast Extract | 5.0 g |
| Sodium Chloride | 2.5 g |
| L-Cystine | 0.5 g |
| Sodium Thioglycollate | 0.5 g |
| SPS | 0.5 g |
| Magnesium Sulfate | 0.2 g |

Schaedler Broth, 70 mL

| | |
|-----------------------|--------|
| Casein Peptone | 7.5 g |
| Dextrose | 6.5 g |
| Yeast Extract | 5.0 g |
| Tris Buffer | 3.0 g |
| Meat Peptone | 2.5 g |
| Sodium Chloride | 1.6 g |
| Soy Peptone | 1.0 g |
| SPS | 0.5 g |
| L-Cystine | 0.4 g |
| Dipotassium Phosphate | 0.2 g |
| Hemin | 0.01 g |

**Adjusted and/or supplemented as required to meet performance criteria.*

Each culture bottle contains an atmosphere of CO₂ and N₂.

BBL SEPTI-CHEK Slides: Approximate Formula* Per L of Processed Water

Agar 1: Chocolate Agar

| | |
|------------------------------------|---------|
| GC Agar Base | 36.0 g |
| Hemoglobin Powder | 15.0 |
| BBL™ IsoVitaleX™ Enrichment | 10.0 mL |
| Granulated Agar | 4.0 g |

Agar 2: MacConkey Agar

| | |
|-----------------|--------|
| Peptones | 20.0 g |
| Agar | 18.0 |
| Lactose | 10.0 |
| Sodium Chloride | 5.0 |
| Bile Salts | 1.5 |

| | |
|----------------|-------|
| Neutral Red | 0.03 |
| Crystal Violet | 0.001 |

Agar 3: Malt Agar

| | |
|--------------|--------|
| Malt Extract | 30.0 g |
| Agar | 18.0 |

**Adjusted and/or supplemented as required to meet performance criteria.*

Warnings and Precautions:

For *in vitro* Diagnostic Use

Do not use bottles that exhibit any cracks or defects. Discard bottles in the appropriate manner.

Before sampling a presumptively positive bottle, it is necessary to release gas which often builds up due to microbial metabolism. See Item 8 in "Performance of Test" section for instructions on venting bottle prior to sampling.

Inoculated bottles should be decontaminated prior to discarding.

Pathogenic microorganisms including Hepatitis and Human Immunodeficiency Viruses may be present in specimens. "Standard Precautions" ⁵⁻⁷ and institutional guidelines should be followed in handling all items contaminated with blood or other body fluids.

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